ABSTRACT

A light scattering particle detector includes a semiconductor laser as a light source, for detecting particles contained in sample fluid which defines a flow path, wherein laser light generated from the semiconductor laser is irradiated to irradiate a region of the flow path with a concave mirror and thereby a particle detecting region is defined.

A laser oscillator wherein the optical axis of a semiconductor laser, for generating pumping laser light, has a predetermined non-linear angle with respect to the optical axis of a laser medium. Using such a laser oscillator, laser light is condensed to irradiate a region of a flow path defined by sample fluid, and thereby a particle detecting region is defined. Particles contained in the particle detecting region are detected by receiving scattered light with a light receiving portion.